Full Spectrum Deterrence: Pakistan's Strategic Compulsion

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Introduction

Operationalization of deterrence theory in South Asia can be traced to the period before India and Pakistan became overtly nuclear in May, 1998. Prior to the nuclear tests by both the countries varying degrees of ambiguity existed regarding their nuclear capabilities. There was little doubt whether India had this capability after its 1974 nuclear test. But whether it had developed nuclear weapons remained a subject of debate in certain quarters. Greater ambiguity however, prevailed about Pakistan's nuclear program as its nuclear programme was wrapped in secrecy before 1998 tests. Both India and Pakistan believed that the other had developed nuclear weapons in 1990. Roots of South Asian deterrence therefore could be traced to this period, when the two major South Asia states, with their inherent rivalries, were deterred from taking undue military risks.

Deterrence has transformed the force postures and altered the threat perceptions of the two major South Asian nations. Once prevalent threat of total war has been reduced to the level of low intensity conflicts after the induction of nuclear weapons in their arsenals. But this perception was complicated by developing ballistic missile systems by both states and their increasing quantities and improving quality. The situation was further complicated by increasing asymmetry in the conventional force ratio of the two adversaries leading to development of Cold Start Doctrine (CSD) (Proactive Strategy) by India. In order to counter Indian CSD Pakistan has added short range nuclear weapons in its deterrent force.

Pakistan's nuclear posturing is a critical study of nuclear and deterrence related security dilemma *vis a vis* India.[1] India's growing economy and stretching military and strategic muscle has affected the balance of power between the two adversaries. Pakistan on the other hand with a smaller economy is trying to maintain strategic balance and deterrence equation in the region. To maintain this balance Pakistan has fine tuned its doctrine for a comprehensive response to

its perceived threat. This comprehensive response developed by Pakistan is termed Full Spectrum Deterrence (FSD) and aims to deter the adversary from aggression against it, whether the threat to its security emanates from a conventional or a strategic source.

Deterrence: theoretical Framework

With the inception of nuclear weapons the debate regarding their use was also started. US being the only nuclear weapon state till 1949 was threatened by the possession of nuclear weapons by other states particularly by the erstwhile USSR. Avoidance of war, thereafter, became the main goal of the policymaking and strategic thinking. Bernard Brodie observed in this regard that, "the chief purpose of US military establishment has been to win wars. From now on, its chief purpose must be to avert them." [2]

Nuclear deterrence is recognized by the strategists as the principal factor in nuclear weapon states' policies. Deterrence is commonly understood as the ability to dissuade a state from embarking upon a course of action prejudicial to one's vital security interests/core values, based on a demonstrated capability.[3] The theoretical rationale of deterrence remains the probability of unacceptable 'use of force', by the adversary albeit nuclear.[4]

Deterrence has been articulated differently by different states according to their strategic policies and postures: massive retaliation, mutually assured destruction, flexible response, graduated deterrence, extended deterrence, punitive retaliation, limited deterrence, minimum deterrence, existential deterrence etc.[5] A stable deterrence leads to a stable relationship between the two nuclear states. The two terms, deterrence and stability are used together in order to denote this relationship. Therefore the term deterrence stability or nuclear stability is commonly used to describe this relationship.[6]

Framework of South Asian Deterrence

Deterrence concept in South Asia began to develop after 1998 nuclear tests. Deterrence relationship between India and Pakistan has been driven by the perceived security threats by these states and the strategic environment of the region. It therefore can be graded in proportion to strength added to its force by

each adversary. In order to understand the existing deterrence strategies of both states it is important to analyze the peculiar complexities attached to each state's deterrent postures.

South Asian strategic environment is different from other regions. India and Pakistan have a history of uneasy relationship. Their geographical contiguity had led to major wars and military conflict situations during, both, overt and covert nuclearization periods. In the wake of these compulsions both states have maintained strategic policies which suit each side's national interest. India aspires to attain the status of a regional hegemon and a major global player. It has, therefore, developed both conventional and strategic forces. Pakistan on the other hand is handicapped by its limited resources and cannot maintain parity with India at all levels of military preparedness. Asymmetry at conventional force level, lack of geographical depth and short flight time from Indian airbases makes Pakistan vulnerable to Indian conventional force attack. Lack of geographical depth, however, gives certain advantages to Pakistan as well, as its forces are stationed close to the borders during peace times and would take relatively less time to mobilize and reach the border with India.

Both India and Pakistan have declared minimum credible deterrence as the determinant of their respective nuclear force posture. After 1998 tests, doctrines and organizational structure of the state's nuclear establishment were redesigned.[7] What we have now is the South Asian version of deterrence which is variously described as 'minimum', 'recessed', and 'existential.'[8] The concept of minimum credible deterrence, however, is dynamic in nature. Credibility of a state's minimum credible deterrence would be strengthened or weakened by the asymmetry between their nuclear forces. India in its draft nuclear doctrine recognizes the nature of this concept.

> India shall pursue a doctrine of credible minimum nuclear deterrence. In this policy of 'retaliation only,' the survivability of our arsenal is critical. This is a dynamic concept related to the strategic environment, technological imperatives and the needs of national security. The actual size, components, deployment and employment of nuclear forces will be decided in the light of these factors. India's peace time posture aims at convincing any potential aggressor.

(a) any threat of use of nuclear weapons against India shall invoke measures to counter the threat: and
(b) any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor.[9]

Pakistan's deterrence policy was announced by Prime Minister Nawaz Sharif after 1998 nuclear tests. He declared 'minimum credible deterrence' as the state's nuclear policy which also claims avoidance of arms race in the region. [10] In his statement Mr. Nawaz Sharif did not de-link nuclear deterrence from the conventional threat his country was faced with.

Pakistan's policy of minimum credible deterrence is translated into four objectives: deterrence of all forms of external aggression; building to this effect an effective combination of conventional and strategic force; avoiding a pre-emptive strike through protection and the threat of nuclear retaliation; stabilizing strategic deterrence in South Asia.[11]

Both sates upgraded their deterrence ability in response to evolving security threats.

As mentioned before deterrence debate in South Asia started after India-Pakistan nuclear tests of 1998. It was further complicated by the crises like Kargil in 1999, twin crises of 2001-2002 and Mumbai terrorist attack, when the two countries came to the brink of war. Each event brought a transformation in the doctrines of these states at both conventional and strategic levels. The failure of Indian 'Sundarji Doctrine' in Operation Parakram 2001-2002 led India to develop a capability for conducting limited conventional war, and at the same time avoiding a nuclear war. India officially announced Cold Start Doctrine a limited war strategy as part of its overall strategic policy. This new doctrine marked a break from the fundamentally defensive orientation that the Indian military has employed since independence in 1947.[12] The purpose of doctrine is to conduct surprise military operations without breaching nuclear threshold and giving a chance to its adversary (Pakistan) to respond, at the same time restricting the option of a third party intervention.

Indian military expansion of conventional force has increased the gap between the conventional forces of the two states. India's strategic alliance with western

countries, its strategic partnership with US, and arms procurement from several countries also added to the deterrence balance in India's favor. By signing civil nuclear deal with India, US had given a privileged treatment to India. This deal had an adverse effect on strategic stability in South Asia. All these developments and advancements in conventional and strategic realms had increased pressure on Pakistan, necessitating suitable measures, in order to restore stability in the region.

Genesis of Pakistan's Full Spectrum Deterrence Concept

According to official statements of Pakistan's National Command Authority (NCA) and Strategic Plans Division (SPD) purpose of Full Spectrum Deterrence (FSD) is to plug the gap created by Indian conventional advantage in the deterrence stability in South Asia. It is a qualitative response by Pakistan to counter the threat created by Indian CSD. Its scope ranges from conventional to strategic, and to the tactical levels.

The 'full spectrum' is not a 'quantitative' idiom, but a 'qualitative' response to new war fighting concepts of 'Cold Start' and Pro Active Operations (PAO), introduced by India. Full spectrum offers a range of options to the decision-makers.[13]

For operationalization of FSD Pakistan has introduced short range ballistic missiles. The gap created by India's conventional force advantage has been plugged by the tests of delivery systems, ballistic missile called NASR and air launched cruise missile Raad.

Director General SPD, Lt. Gen Khalid Ahmed Kidwai, after the NASR test stated, "the test was a very important milestone in consolidating Pakistan's strategic deterrence capability at all levels of the threat spectrum." At policy level it comes under the strategy of Full Spectrum Deterrence. He added that, "the NASR weapon system now provided Pakistan with short range missile capability in addition to the already available medium and long range ballistic missiles and cruise missile in its inventory."[14] NASR is to counter Indian aggression at conventional level which is widening day by day. Pakistan due to its economic constraints cannot counter it entirely through conventional means.

NASR does not bring any major changes in Pakistan's nuclear doctrine at doctrinal level. Pakistan still maintains a defensive posture and nuclear first use. But it adds strength to its deterrence. The aim of NASR is not to induct weapons of use, but "weapons of deterrence" to counterbalance India's move to conventional military offensives to a tactical level."[15] These weapons add an extra layer to Pakistan's deterrence but operationalization of tactical nuclear weapons may pose some problems. A lot of work has been done by Pakistan's strategists for practical implementation of policy as short range missiles have been successfully tested but the issue of their utilization during a crisis has a few challenges.

Operationalization of FSD requires the employment, deployment and accurate time of use of tactical nuclear weapons against the adversary. According to Pakistan's narrative tactical nuclear weapons are to balance the conventional advantage of India. On the other hand India perceives it differently. India perceives it to be a destabilizing factor in the region. In response India has announced its policy of massive retaliation according to which no matter what the nature of nuclear threat is (tactical or strategic) it would come under strategic realm and would be countered by massive retaliation.

Cold Start Doctrine theorists had not taken into account the basic premise of the Pakistani posture of Minimum Credible Deterrence (MCD) that aims to deter conventional force by employing nuclear deterrence. The greater the conventional threat, lower would be the threshold to employ nuclear deterrence. But in this action reaction paradigm tactical weapons would play a role. According to which Pakistan would deploy battlefield nuclear weapons to counter any Indian conventional force aggression. Development of TNW gives more flexibility to Pakistani strategists as it would not be forced to use strategic nuclear weapon as a first response to India's overwhelming conventional force in the eventuality of a major aggression against it. At the same time TNW can be used only as a weapon of defense against an invading force and cannot be used in an offensive role. As a result of this development Pakistan has increased its range of responses against a possible Indian aggression. It increases Pakistan's options in case of an Indian aggression and it can proportion its response according to the level of threat against it. Short range nuclear weapons have added flexibility to Pakistan's response. Pakistan now has flexibility to counter Indian aggression with a complete range of military responses to deter an attack against it.

The policy of flexible response was first developed by US against Soviet threat in 1960's. In order to deter Soviet Union's overwhelming conventional military advantage the United States had introduced TNW's in its deterrent force structure.

Issues related to FSD and development of TNW's

A number of questions have been raised on the development and introduction of these weapons in Pakistan's deterrent force structure and its impact on strategic and deterrence stability of the region.

Certain observers have tried to understand dynamics of TNW's induction in South Asia in the light of Cold War experiences. South Asian deterrence cannot be fully explained by theories developed during the Cold War. There are a number of factors which differentiate South Asian deterrence from Cold War deterrence structures. There was no possibility of direct conventional forces confrontation between US and USSR due to absence of geographical proximity between the two adversaries. In South Asia on the contrary relations between the two South Asian nuclear powers are rooted in the bitter history of their creation, unresolved disputes, and geographical contiguity between them. In addition Soviets had not developed a strategy similar to CSD under which it could move its conventional forces in Europe with a short warning time to the adversary.

Issue of needed quantity of these weapons has also been voiced by certain analysts. It would be futile to speculate an absolute number of TNW's that would suffice to deter Indian aggression. Number of TNWs sufficient for deterring Indian conventional force attack against Pakistan would depend on the following determining factors; level of threat from Indian conventional force capability and the space in which Pakistan plans to deploy these weapons. Additionally against which force these weapons and in which geographical terrain can TNW's be most effectively used. Pakistan's stockpiles for short range ballistic missiles will most likely be proportionate to Indian conventional force capabilities in order to maintain balance in the region. Unlike India, Pakistan's rationale of nuclear weapons program is not prestige driven. Pakistani policy makers have said on a number of occasions that the decision to develop TNW's was necessitated by the threat created by India's conventional force build up and its doctrinal adjustment

to use it. Therefore Pakistan's strategic policy response at tactical level is not likely to be notional as induction of TNW's in Pakistan's nuclear force would be need based. The question of sufficiency would depend on the requirement and nature of targets to be engaged.

According to the existing literature and experience of Cold War the employment of TNW's make command and control system more problematic. Positioning of these weapons on the battlefield makes it vulnerable to the adversary's attack, and unauthorized use. A command and control system for battlefield nuclear weapons would also need a degree of autonomy for the field commanders. Pakistan's declared policy states that even on TNW's it will continue to exercise centralized control through the National Command Centre. But the actual test of command and control of any system would be during a crisis. No state has, as yet experienced a nuclear related crisis in which its command and control system was put to test. Therefore at this stage one cannot challenge the robustness and effectiveness of Pakistan's command and control system. Pakistan has maintained its policy of assertive control for tactical weapons so far but decision might be taken for delegative command posture according to the requirement during a crisis, but it's too early to predict.

Two questions usually come under discussion with regard to induction of TNW's in Pakistan's nuclear force. Whether Pakistan had developed miniaturized nuclear weapons which can be used on short range nuclear missiles, and if these weapons have been tested. SPD and NCA have not made any information public on these issues. It is however, well documented that Pakistan had been working on Plutonium technology since 1987 when work commenced on 40-50- MW Khushab reactor.[16] The sole purpose of Khushab reactor is to produce Plutonium for the nuclear warheads according to certain sources. It has also been mentioned that Pakistan was also very close to acquiring Plutonium routes to nuclear technology when it tested uranium based nuclear weapons in 1998.

Apparently it seems that Pakistan has developed low yield plutonium based nuclear warheads otherwise there would be no justification of introducing NASR in its nuclear force. Enhancement of such capabilities might also lead to nuclear tipping of Baber and Raad cruise missiles that could be launched from naval fleets and submarines in future conflicts.

Conclusion

Relations between Pakistan and India are burdened by the heavy baggage of their past history and unresolved disputes. The two major states of South Asia have fought wars and faced crises situation on a number of occasions in their history of 67 years. Pakistan became particularly vulnerable after 1971 war with India as a result of which it was dismembered and its eastern part was separated from it. Pakistan as a result of this war assessed that its limited resources could be more effectively put to use if it developed nuclear deterrent against its larger and more resourceful adversary. India was already on the path of acquiring military nuclear technology as proved by the test it carried out in 1974. After 1974 Indian test Pakistan redoubled its efforts to develop nuclear weapons. Despite international pressures and technological hiccups it remained focused and succeeded in its objective. Both India and Pakistan tested their nuclear devices in 1998 and since their nuclear deterrence became the center piece of the external security policies of both India and Pakistan. Both states have gradually developed more sophisticated nuclear weapons and delivery systems. Pakistan being a smaller power, compared to India, is not in a position to engage in an arms race with its adversary. It particularly perceived enhanced threat after the development of CSD (proactive strategy) by India. India had developed this doctrine which would allow it to use its conventional force advantage against Pakistan and keep it below Pakistan's nuclear threshold. Pakistan responded by developing and testing short range nuclear capable missile.

In order to maintain deterrence in the region Pakistan has adopted the policy of flexible response through introduction of tactical nuclear weapons. Pakistan's strategy gives it's the advantage of managing threat of conventional military asymmetry by integrating conventional defense with its nuclear deterrent capability. Addition of TNW's to nuclear forces will supplement the dynamics of strategic nuclear deterrence between India and Pakistan and promote deterrence stability.

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Endnotes

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